Amendment To The Claims

Please amend the claims as follows:

1. (Currently amended) A method of encoding a plurality of audio/video (AV) programs for simultaneous display on a display device, comprising:

generating or recovering at least one non-composited digital transport stream having said plurality of AV programs by a tuner;

augmenting said at least one non-composited digital transport stream with control information by a stream encoder, said control information operative to invoke simultaneous display of said plurality of AV programs on said display device; and

transmitting said at least one non-composited digital transport stream as augmented over a digital link coupled to the display device.

2. (Original) The method of claim 1, wherein said at least one non-composited digital transport stream comprises a single digital transport stream having a control packet associated with said plurality of AV programs.

3. (Original) The method of claim 2, wherein said control information comprises identification data associated with each of said plurality of AV programs, said identification data disposed within said control packet.

4. (Original) The method of claim 3, wherein said control packet comprises a program map table (PMT), and wherein said identification data comprises packet identifiers

(PIDs) associated with packets defining said plurality of AV programs, said PIDs

disposed within a descriptor of said PMT.

5. (Original) The method of claim 1, wherein said at least one non-composited digital

transport stream comprises a single digital transport stream having a first control packet

and a plurality of second control packets, each of said plurality of second control packets

associated with a respective one of said plurality of AV programs.

6. (Original) The method of claim 5, wherein said control information comprises

identification data associated with each of said plurality of second control packets, said

identification data disposed in said first control packet.

7. (Original) The method of claim 6, wherein said first control packet comprises a

program association table (PAT), wherein each of said plurality of second control packets

comprises a program map table (PMT), and wherein said identification data comprises

packet identifiers (PIDs) associated with said PMT of each of said plurality of second

control packets, said PIDs disposed within an adaptation field of said PAT.

8. (Original) The method of claim 1, wherein said control information comprises a

command having identification data associated with said plurality of AV programs.

9. (Original) The method of claim 8, wherein said command comprises an operational

code to invoke said simultaneous display, and wherein said identification data comprises

a plurality of pairs of source and destination plugs, each of said plurality of pairs of source and destination plugs associated with a respective one of said plurality of AV programs.

10. (Original) The method of claim 8, wherein said at least one non-composited digital transport stream comprises a plurality of digital transport streams, each of said plurality of digital transport streams associated with a respective one of said plurality of AV programs.

11. (Original) The method of claim 8, wherein said at least one non-composited digital transport stream comprises a single digital transport stream associated with said plurality of AV programs.

12. (Currently amended) A method of decoding a non-composited digital transport stream having a plurality of audio/video (AV) programs configured for simultaneous display at a display device, comprising:

receiving said at least one non-composited digital transport stream over a digital link coupled to a source device by an interface;

extracting control information from said at least one non-composited digital transport stream;

identifying said plurality of AV programs within said non-composited digital transport stream in response to said control information; and

simultaneously displaying said plurality of AV programs as identified on the display device.

13. (Original) The method of claim 12, wherein said at least one non-composited digital transport stream comprises a single digital transport stream having a control packet associated with said plurality of AV programs.

14. (Original) The method of claim 13, wherein said control information comprises identification data associated with each of said plurality of AV programs, said identification data disposed within said control packet.

15. (Original) The method of claim 14, wherein said control packet comprises a program map table (PMT), and wherein said identification data comprises packet identifiers (PIDs) associated with packets defining said plurality of AV programs, said PIDs disposed within a descriptor of said PMT.

16. (Original) The method of claim 12, wherein said at least one non-composited digital transport stream comprises a single digital transport stream having a first control packet and a plurality of second control packets, each of said plurality of second control packets associated with a respective one of said plurality of AV programs.

17. (Original) The method of claim 16, wherein said control information comprises identification data associated with each of said plurality of second control packets, said

identification data disposed in said first control packet.

18. (Original) The method of claim 17, wherein said first control packet comprises a program association table (PAT), wherein each of said plurality of second control packets comprises a program map table (PMT), and wherein said identification data comprises packet identifiers (PIDs) associated with said PMT of each of said plurality of second control packets, said PIDs disposed within an adaptation field of said PAT.

19. (Original) The method of claim 12, wherein said control information comprises a command having identification data associated with said plurality of AV programs.

20. (Original) The method of claim 19, wherein said command comprises an operational code to invoke said simultaneous display, and wherein said identification data comprises a plurality of pairs of source and destination plugs, each of said plurality of pairs of source and destination plugs associated with a respective one of said plurality of AV programs.

21. (Original) The method of claim 19, wherein said at least one non-composited digital transport stream comprises a plurality of digital transport streams, each of said plurality of digital transport streams associated with a respective one of said plurality of AV programs.

22. (Original) The method of claim 19, wherein said at least one non-composited digital

transport stream comprises a single digital transport stream associated with said plurality

of AV programs.

23. (Original) An encoder for encoding a plurality of audio/video (AV) programs for

simultaneous display on a display device, comprising:

a multiplexer unit for generating at least one non-composited digital transport

stream from said plurality of AV programs; and

a control information unit for augmenting said at least one non-composited digital

transport stream with control information, said control information operative to invoke

simultaneous display of said plurality of AV programs on said display device.

24. (Original) The encoder of claim 23, further comprising:

interface circuitry for transmitting said at least one non-composited digital

transport stream as augmented over a digital link coupled between said encoder and said

display device.

25. (Original) A decoder for decoding at least one non-composited digital transport

stream having a plurality of AV programs configured for simultaneous display on a

display device, comprising:

a control information analyzer for extracting control information from said at least

one non-composited digital transport stream, said control information operative to invoke

simultaneous display of said plurality of AV programs on said display device; and

a demultiplexing unit for recovering said plurality of AV programs within said

non-composited digital transport stream in response to said control information.

26. (Original) The decoder of claim 25, further comprising:

interface circuitry for receiving said at least one non-composited digital transport

stream over a digital link.

27. (Currently amended) A ~~physical~~ computer readable medium including program

instructions that instruct a computer to perform a method of:

generating or recovering at least one non-composited digital transport stream

having said plurality of AV programs;

augmenting said at least one non-composited digital transport stream with control

information, said control information operative to invoke simultaneous display of said

plurality of AV programs on said display device; and

transmitting said at least one non-composited digital transport stream as

augmented over a digital link coupled to the display device.

28. (Currently amended) A ~~physical~~ computer readable medium including program

instructions that instruct a computer to perform a method of:

receiving said at least one non-composited digital transport stream over a digital

link coupled to a source device;

extracting control information from said at least one non-composited digital

transport stream;

identifying said plurality of AV programs within said non-composited digital

transport stream in response to said control information; and

simultaneously displaying said plurality of AV programs as identified on the

display device.